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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,271	(03/04/2004	Martinus Agnes Willem Cuijpers	081468-0308590 4234	
909	7590	02/16/2006		EXAMINER	
PILLSBUR	Y WINT	HROP SHAW PI	JONES, JUDSON		
P.O. BOX 10 MCLEAN,		2	ART UNIT	PAPER NUMBER	
1,1022,11,				2834	
				DATE MAILED: 02/16/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
` Office Action Summary	10/792,271	CUIJPERS, MARTINUS AGNES WILLEM				
Office Action Summary	Examiner	Art Unit				
	Judson H. Jones	2834				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was preply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 05 De	<u>ecember 2005</u> .					
2a) This action is FINAL . 2b) ⊠ This	action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) 17,18,24 and 25 is/ar 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-16 and 19-23 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	re withdrawn from consideration.					
Application Papers						
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 16 March 2005 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Example 11.	a)⊠ accepted or b)⊡ objected to drawing(s) be held in abeyance. Sec tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Professors als Retail Provides Review (PTO 048)	4)					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	🗖	ate Patent Application (PTO-152)				

DETAILED ACTION

Applicant's election without traverse of group 1, claims 1-16 and 19-23 in the reply filed on 12/5/2005 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9-16, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chitayat 4,985,651. Chitayat discloses a system for moving an object comprising a first and second linear actuator 32 having coils and magnets on both sides of the Y stage along with third and fourth linear actuators 20, 24 having coils and magnets on both sides of the X stage with the first and second linear actuators supporting object carrier 36 all as shown in figure 1 and as described in column 5 line 62 to column 6 line 12. Only one Y stage linear motor is shown in figure 1 but the text of the reference explains "For present purposes, Y movable assembly may be the same as, or different from the X movable assembly 18." The same as the X assembly means having two linear motors instead of a single motor and an outboard bearing assembly.

In regard to claims 3 and 4, see Chitayat column 6 lines 49-52.

In regard to claims 9-15, see Chitayat figure 1.

In regard to claims 16, 19 and 20, see Chitayat column 6 lines 13-18. Claims 19 and 20 are method claims. The structural limitations and the method limitations of using that structure are met by Chitayat.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-8 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chitayat 4,985,651 in view of Chitayat 5,519,266. Chitayat '651 discloses the system for moving an object in a plane but does not disclose details of the linear motors. Chitayat 5,519,266 teaches alternating magnetic poles and a coil structure having an iron core with teeth as shown in figure 3. Since Chitayat '266 and Chitayat '651 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized alternating magnetic poles and an iron core with teeth because Chitayat '651 does not disclose any linear motor details.

Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chitayat in view of Kyomansu et al. 6,727,666 B2. Chitayat discloses the method of moving an object in a plane with control means for controlling first, second, third and fourth linear actuators but does not disclose a feedback system for inputting a set position, determining an actual position, creating a control signal based on the target and actual positions and feeding that control signal to linear actuators. Kyomansu et al. teaches a feedback system for inputting a position command signal (i.e., a set position), determining an actual position, determining a control signal based on the position command and actual positions and feeding that control signal to linear actuators in column 5 lines 14-22. Since Kyomansu et al. and Chitayat are from the same field of endeavor it

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would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a feedback control system in order to better control the positioning of the object carrier and thus increase the precision of the device.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chitayat as modified by Kyomansu et al. as applied to claim 21 above, and further in view of

Kwan et al. 6,635,887 B2. Chitayat as modified by Kyomansu et al. discloses the object carrier

but does not disclose individually controlling parallel linear actuators. Kwan et al. teaches

individually controlling linear actuators in order to increase control over the positioning device

in column 7 lines 11-15. Since Kwan et al. and Chitayat are from the same field of endeavor it

would have been obvious at the time the invention was made for one of ordinary skill in the art

to have utilized individual control of parallel linear actuators in order to increase control over the

positioning system.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Binnard et al. US 220/0034695 A1 also discloses first, second, third and fourth linear actuators for moving an object in a plane where the third and fourth linear actuators support the first and second linear actuators and the first and second linear actuators support an object carrier.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H. Jones whose telephone number is 571-272-2025. The examiner can normally be reached on 8-4:30 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Judson H. Jones 2/10/2006

KARL TAMAINER